

NAVAL WAR COLLEGE  
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**Counterproliferation: Planning Considerations for the Commander**

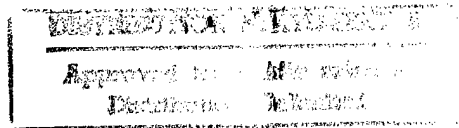
by  
**Charles A. Flynn**  
CPT, USA

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements for the JMO Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature:

*Charles A. Flynn*



Signature Faculty Advisor:

X *A. Shink*

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## ABSTRACT

Developing plans to deter or defeat an enemy possessing weapons of mass destruction (WMD) is complex due to the complications and difficulties these weapons add to asymmetric battlefields. Future adversaries in the post cold-war will use these to create massive casualties, disrupt our freedom of action to project power, cause public relations nightmares through media exploitation, effect coalition agreements, and apply pressure to US Leadership-- all in an effort to test our resolve.

Operational Commanders must be clear in defining active and passive counterproliferation measures they must take to retain operational protection and tempo. The planning process at the operational level must accurately analyze the mission, commanders must give detailed guidance, and the entire staff must correctly apply the operational factors and tenets to produce plans that have high probabilities of success. Often execution of the plan will determine the outcome but failing to plan properly and test the full range of options will contribute to situations with far-reaching and potentially disastrous consequences.

*The Threat of WMD in the Future: In fact, in most areas where U.S. forces could potentially be engaged on a larger scale, many of the most likely adversaries already possess chemical or biological weapons. Moreover, some of these states appear determined to acquire nuclear weapons. Weapons of mass destruction in the hands of a regional power could threaten not only U.S. lives and U.S. interests but also the viability of its regional power projection strategy.*

Secretary of Defense's Annual Report  
to Congress, February 1995 1

## **INTRODUCTION**

Developing operational plans to defeat an enemy possessing weapons of mass destruction (WMD) is complex due to the complications and difficulties these weapons add to asymmetric battlefields. Future adversaries in the post-Cold War environment will use these munitions to neutralize, delay and/or defeat the known superior capabilities of U.S. conventional forces. WMD creates massive casualties, disrupts freedom of action to project power, causes public relations challenges through media exploitation, effects coalition agreements, and applies pressure to U.S. Political and Military Leadership -- all in an effort to test our resolve. Accurately aimed and well timed, a minimum payload of WMD would generate maximum political and psychological shock.

The U.S. Military prides itself in applying lessons learned from previous wars and training exercises to formulate doctrine, structure, strategies, and plans to dominate the battlefield and establish conditions for decisive victory. Based on our limited experiences operating in a nuclear, biological, and chemical (NBC) environments, unpredictability of rogue nations and terrorists, and political sensitivity to taking military action, the planning process against WMD is challenging. Mission success is often determined

during execution yet the detailed plans that may deter, preempt, or successfully attack proliferators are paramount.

### **DEFINING COUNTERPROLIFERATION**

Since the unveiling of the term --counterproliferation-- in 1993 by Les Aspin and the Clinton Administration, numerous documents examined the term to clarify its true meaning. "Pentagon officials now privately concede that the selling of counterproliferation was a public relations nightmare."<sup>2</sup> Large amounts of confusion come from the use of the pre-text "counter". Often the debate centers around its offensive military tone and becomes associated with descriptions such as "attack" or "strike." The Pentagon has "labored mightily to assure countries what counterproliferation is (prudent military contingency planning), while at the same time explaining what it is not (preemptive military strikes)."<sup>3</sup> The Clinton administration, obviously not wanting to portray that message, continues to spend a great deal of time attempting to clarify this policy statement.

Despite the confusion with the definition of the policy, two characteristics of counterproliferation remain consistent --(a) active counterproliferation and (b) passive counterproliferation-- these measures are taken by military forces when confronted with the WMD threat. Active counterproliferation measures include military capabilities "by consideration of a full range of options to seize, disable, destroy, or otherwise deny the use of WMD."<sup>4</sup> For the Operational Commander this course of action is the last resort and involves the tasks to neutralize or defeat which are normally analogous with high risk. Air Force and Navy precision-guided munitions (PGM) or special operation forces

(SOF) are likely to carry out these missions because they are surgical, rapidly deliverable, present low casualty signatures, and the majority of WMD or related facilities are behind enemy lines.

Conversely, passive counterproliferation measures are the “preparations taken by U.S. Forces to fight and survive in a WMD environment.”<sup>5</sup> This military planning allows the operational commander and staff to maximize efforts of force protection. Operational protection is defined as the “ability to conserve the fighting potential of a force...It includes actions taken to counter the enemy firepower and maneuver by making soldiers, systems and formations difficult to detect, strike, and destroy.”<sup>6</sup> Passive measures involve “activities from intelligence collection, to doctrine, procurement, and training, that is comprehensible and amounts to prudent contingency planning.”<sup>7</sup>

At the operational level, active and passive measures of counterproliferation must focus on-- (a) force protection to conserve combat power, and-- (b) retaining the initiative to conduct offensive actions, when directed in response to known threats or enemy actions. “Offense is unlikely to be 100 percent effective in at least some cases. Therefore, to be effective in counterproliferation, the U.S. needs to increase its capability for active and passive defense.”<sup>8</sup>

### **WMD AND OPERATIONAL FACTORS**

“The primary military threat to future U.S. power projection capability will be the disruption of the *operational tempo*, not in the actual casualties.”<sup>9</sup> Countries with known or suspected WMD capabilities present numerous dilemmas, and extensive considerations of the operational factors is critical. Enemy intent for WMD may not be to inflict

massive casualties but to deny U.S. Forces key principles of war like speed, maneuver, offensive, mass, and security. Successful enemy disruption of our staging and deployment phases acts to seize the initiative and effects our quick and decisive capabilities.

Third World countries, faced with dwindling stockpiles and limited munitions for delivery, will pick their targets carefully to maximize effects. To illustrate, “chemical weapons produced less than 5 percent of the more than 1 million Iran-Iraq war casualties.”<sup>10</sup> “Nevertheless, (they) had a critical effect on the Iranian military and civilian morale by late 1987, and during Iraqi counter-offensives in 1988. Sheer killing power is not the key measure of success: it is rather the strategic, tactical and psychopolitical impact of the use of such weapons.”<sup>11</sup> One chemical or biological warhead properly targeted and timed, degrades U.S. Forces ability to dictate *operational tempo* and execute *de-centralized simultaneous operations*. Losing *operational momentum* reduces battlefield capabilities, jeopardizes our timeline, and exploits weaknesses.

The National Military Strategy notes “power projection” as one of the key principles that guides employment of U.S. Forces.<sup>12</sup> Therefore, commanders must understand the effects WMD will have on *operational tempo, protection, and the following three groups*; (a) *momentum, phasing, and synchronization*; (b) *sustainment and pauses*; and (c) *deception and fires*. These factors must be analyzed and monitored throughout the planning and execution phases. Friendly *center(s) of gravity* are subject to *direct or indirect attacks* when *operational factors* are adversely effected by WMD.

*Momentum, phasing, and synchronization* directly impact two principles of war-speed and mass. *Momentum* allows us to penetrate our enemy's operational depth by combining speed and mass. *Synchronization* is "the ability to focus resources and activities in time and space to produce maximum relative combat power at a decisive point."<sup>13</sup> Employment of WMD breaks the cumulative effects of these factors and degrades U.S./Coalition combat power. *Phasing* is threatened because start and end events are not overcome, and objectives to enter subsequent phases are never achieved. To avoid disruptions in *momentum, phasing, and synchronization* the operational staffs must plan to rapidly concentrate forces through multiple points of entry, protect the force by conducting disciplined passive countermeasures, and *synchronize phases* to retain *momentum*.

Adverse effects on *sustainment and pauses* factors prevent us from regenerating combat power and bring us to our culminating point at undesirable times. Chemical or biological weapons landing in the vicinity of Dhahran/Dammam ports in the early stages of Desert Shield would have caused contamination of forward staging bases, deployment and *logistics* problems, and dictated unwanted *pauses* to the operation. U.S. *operational reach* would have been reduced due to the distances added on to the LOC's within the theater. Regaining *operational agility* from the Iraqis' would have required an unimaginable amount of time and resources. To avoid these problems we must plan on dispersment of logistics cells, create joint missile defense networks, and establish joint decontamination sites.

*Deception and fires* are two tasks that provide the operational commander freedom of action within his area of operations. Due to our technological edge, U.S. Forces can manipulate the enemy commanders decision-cycle and convince him that his perceptions are accurate. Misleading the enemy into firing WMD munitions at the wrong time and target will create losses of munitions, unwanted public media attention, and force the enemy to execute a course of action that we could exploit. Properly developed *fires* and *deception* plans provide the Operational Commander the ability to exploit enemy intelligence collection systems, reserve forces, and enhance friendly force protection by avoiding or bypassing enemy WMD fires.

WMD threats are complicated and numerous, the simple act of launching a well targeted round may have long term effects. Planners should be more concerned with neutralizing enemy WMD systems rather than worrying about the abilities of tactical level forces to wear NBC gear and function in a contaminated environment. Planning at the operational level must focus on force oriented active and passive countermeasures to deny the enemy accurate use of WMD in order to *protect the force and control operational tempo*.

### **PLANNING PROCESS CONSIDERATIONS**

*"The use or the threat of use of these weapons(WMD) can cause large scale shifts in strategic and operational objectives, phases, and COAs. Thus, planning for the possibility of both friendly and enemy use is important to campaign design."*

*Joint Pub 3-0* 14

The joint planning process is exhaustive when confronted with regional WMD proliferators and can contribute to mission success or failure. Advances in technology can

overwhelm the process and lead to lack of clarity in the development of the plan.

Planning to deter or defeat a WMD threat often shifts to active countermeasures that involve higher risks yet may destroy the target, stop further proliferation, and reduce escalation of the crisis.

Detailed estimates during the Mission Analysis and Planning Guidance steps will inevitably raise and answer questions early in the process, better define tasks, reduce confusion, and begin to formulate the overall intent. One additional step, not included in planning development phases but certainly worth examining, is the post-hostility or the "consequence management phase."<sup>15</sup> Developing this step early in the JOPES process will save time, prevent the improper utilization of resources, and help planners and operators understand and acknowledge the consequences of WMD fallout to infrastructure, environment, and forces. Strategic failure may be the result of not fully recognizing and developing these steps.

**MISSION ANALYSIS:** The purpose of mission analysis is to "analyze assigned tasks to determine mission and prepare guidance for subordinates."<sup>16</sup> This step determines exactly the problems and provides focus and direction for the commander and staff. The analysis identifies physical and abstract objectives that must be achieved to meet the intent of his superior. Physical objectives are normally force or area oriented but do not always equate to targets, while abstract objectives give a purpose for the tasks.

An illustration of this is to state, destroy chemical production site #1 and #3 in order to prevent the use and spread of mustard gas in the region. The physical objectives are destroying sites #1 and #3, while the abstract is preventing the use and spread of

mustard gas in the region. Physical and abstract objectives expressed together provide further clarity to subordinates. Operational plans should always provide measurements of success like --destroy-- means 60 percent of the mustard gas facility is not operational. The sensitive nature of active countermeasures against WMD objectives and threats makes imperative that the mission analysis clarify the link between abstract and physical objectives. This crucial first step in the process will impact decisions regarding which WMD sites to deter or destroy, what is the type/amount of force, and which weapon system(s) best achieves the purpose.

**COMMANDERS GUIDANCE:** The purpose for Commanders Guidance is to “inform all planners and participants, and develop courses of action.”<sup>17</sup> Successful missions against NBC targets demand clear articulation of purpose from the commander so the staff can develop courses of action with appropriate measures. Failing to communicate the guidance results in the basis for inaccurate courses of actions, wastes valuable planning time, and fails to address commanders intent.

One approach for framing Commanders Guidance is to use the terms *decide*, *detect and deliver*. *Deciding* addresses questions such as; What targets must be attacked to achieve the missions purpose? What forces are available (time dependent) and best prepared to attack each of these targets? What political and environmental decisions must I resolve before we commit forces? Answering these will focus the efforts of the intelligence assets, alert forces and instruct them to conduct pre-NBC checks and training. *Deciding* the objectives that best achieve the desired endstate allows the staff to prioritize

and plan actions for fallout procedures, contamination contingencies, reaction times, and civilian decontamination assistance at multiple targets.

**Detecting** enemy facilities or capabilities raises questions like; What targets can we monitor to pick up indicators of hostile activities? What is the best way (HUMINT, SIGINT, MASINT) to monitor and *detect* an aggressive or offensive posture? In attempting to *detect*, can we initiate a deception plan that influences the enemy leaders decision-cycle? Answering these confirms or denies data collected by various intelligence platforms, defines enemy defense postures, and begins the deception plan to deter or defeat the specific threats. Detecting WMD locations allows the plan to defeat capabilities and not his intentions.

**Delivery** options pose questions such as; What forces or weapons will best achieve the goals? When are the optimum times to *deliver* the force against the target(s)? What will be the effects of collateral damage upon *delivery*? When we deliver the force(s) how can we synchronize the efforts? Answers to these determine whether you achieve *force protection*, maintain *operational tempo*, and minimize collateral damage. This framework for planning recognizes crucial issues that must be resolved because of the unpredictable nature of WMD proliferators.

**POST-HOSTILITY :** In the consequence management phase plans must address numerous contingencies issues like accidental spills or detonations, contamination of men/equipment after returning behind friendly lines, medical treatment of casualties and waste related materials, and post-execution monitoring of the target areas to determine contamination levels. These are just a sample of potential problems of the plans, and

forces must remain flexible to respond. Operations of this magnitude draws global media attention and the consequences of neglecting this phase can create political/military public relations nightmares. To prevent this we must resource and position sizable reserves for flexibility, coordinate with coalition forces, integrate decontamination teams, and seek non-DOD/PVO/NGO assistance. Failing to reduce collateral damage during post-hostilities could be more damaging than the actual execution of the operation.

#### **PROLIFERATION PATH ASSESSMENT AND TARGETING SYSTEM:**

Proliferation Path Assessment and Targeting System (PPATS) is a concept developed by the Defense Nuclear Agency (DNA) and Defense Intelligence Agency (DIA). This system, although still in the developmental stages, is an automated decision making tool that is specifically focuses on proliferation path analysis of foreign NBC weapons programs. For planning it “provides warfighter decision makers, operators, planners, targeteers, and intelligence analysts with a powerful engine for deliberate planning and the development of potential contingency strategies.”<sup>18</sup> With the proper data this system can give estimates on attaining objectives, battle damage assessments of targets, and potential collateral effects.

The system is invaluable to the Operational Commander and staff to assist in conducting detailed concept development and viable courses of action. Currently, at the operational level the U.S. lacks an integrated system that is automated, interoperable, and provides analysis. PPATS gives the “warfighter a need to fully understand the NBC weapon proliferation problem in terms of critical nodes, impact of interdiction, set-back

times, and adverse collateral effects. They need constant analysis, access to all-source intelligence...and the flexibility to adjust to a very fluid situation.”<sup>19</sup>

**OTHER FACTORS IN PLANNING:** Technology provides the U.S. an advantage over most enemies but failing to change how we think and operate in an NBC environment will have devastating results. Plans for *active or passive countermeasures* for operational plans should further develop in these areas; (a) **Doctrine** - Make NBC defense a joint force function and responsibility in order to retain initiative, tempo, and protect the force. Joint Missile Defense Systems with integrated warning platforms could be a point of departure. (b) **Situational Awareness** - “Enhanced situational awareness will increase force readiness by eliminating the need to unnecessarily don protective equipment when no hazard is present.”<sup>20</sup> Develop warning systems that are joint and provide clear pictures of the NBC battlefield. The PPATS is a step in the right direction in assisting to identify the threat prior to a crisis, develop WMD indicators, predict impact/release points, and develop fallout estimates.

(c) **Protection** - Develop simple equipment that is durable, reusable, and reliable. Better equipment will increase confidence and situational awareness levels and reduce logistical burdens. Some civilian off-the-shelf articles are available, but the arcane procurement process denies units the ability to acquire them. Joint Doctrine will also dictate that services share ideas on protective gear and devices. (d) **Recovery** - This process can only speed up with the development of joint decontamination procedures and must be decentralized to restore units rapidly and consolidate our dwindling resources.

Operational tempo depends on quickly reconstituting units and joint doctrine/protection systems will enhance this process.

### **OPERATIONAL TENETS**

Success on the battlefield “depends on the ability of forces to operate in accordance with the operational tenets.”<sup>21</sup> These tenets must be considered when faced with planning operations against a WMD threat.

***Initiative.*** Initiative is achieved by the enemy when WMD is used because of shock effects, degradation of our mobility, and loss of communications. Understanding the threat and directing our actions to defeat enemy offensive capabilities lead to either deterrence or anticipation of use and therefore negate WMD effects and provide US Forces the ability to retain the initiative.

***Synchronization.*** Enemy use of WMD disrupts synchronization by dispersing our formations and mass, slowing momentum, and degrading command and control (C2). Joint forces will attack multiple WMD threats to achieve the overall purpose. Plans must be sensitive to the appropriate application of force at the proper place and time to attain the desired endstate. Collateral damage and fallout control are additional aspects that require synchronization.

***Depth.*** Enemy delivery of WMD outside the area of operations could influence the entire depth of the battlefield. Particles and clouds are not restricted by boundaries and do not discriminate among units. Operationally we must control the battlespace, effectively maneuver forces, and maintain redundant C4I to increase our depth. Detailed

analysis during planning assists in placement of detectors, reconnaissance assets, and other passive means to capitalize on this tenet.

***Agility.*** Enemy WMD properly targeted at our forces it will have negative impacts on our physical and mental capacities to survive in such an environment and limits our ability to maneuver because sections of the battlefield will be contaminated and untrafficable. Successful use of joint NBC doctrine, joint warning systems and reconnaissance, and force protection achieves agility in order to prevent the enemy from dictating the time and place to fight.

***Versatility.*** Operational Commanders can incorporate this through leadership, training, and planning. Versatility is the ability of forces to rapidly shift from one mission to the next and quickly operate in both conventional and NBC environments without a degradation in performance. Larger NBC specialization teams within organizations can provide increased abilities to transition between missions.

### **CONCLUSIONS**

The consequences of using WMD on the battlefield are far-reaching and to some degree incomprehensible, yet this problem is unmistakable and global. The U.S. Military is “faced with a unique set of challenges as it adapts to a world that has changed more broadly and fundamentally than at any other time since World War II.”<sup>21</sup> These challenges are significant when developing operational plans, taking active and passive countermeasures to neutralize an adversaries WMD capabilities.

Creative thinking regarding power projection, operational factors, and tenets will reduce confusion and contribute to innovative plans and contingencies. Although still

undergoing testing, the PPATS system is a unique opportunity that provides operational level data and analysis that is real-time, adaptable, and identifies insights regarding options and decisions that must be considered.

The introduction of proliferation of WMD alters significantly the planning developments for regional conflict. Clausewitz said regarding war plans “No one starts a war-- or, rather no one in his senses ought to do so-- without first being clear in his mind on what he intends to achieve by that war and how he intends to conduct it.”<sup>22</sup>

Operational plans must clearly explain how U.S. Forces will deter or defeat any WMD proliferators from the deployment to post-combat operations, during war and operations other than war, and from rogue nations or terrorist groups.

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